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November 19, 2007

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Art Unit 1713

Commissioner For Patents

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Examiner Lee:

Attached are proposed claims for 11/20/07 interview.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Iqbal Ahmed et al.

Serial No.: 10/706,569 Group Art Unit: 1713 Filed: 12 November 2003 Examiner: LEE, Rip A.

Confirmation No.: 6659

For: SUPERABSORBENT POLYMER HAVING DELAYED FREE WATER

ABSORPTION

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PROPOSED CLAIMS FOR 11/20/07 INTERVIEW

The attached claims are being submitted to the Examiner for consideration during the interview scheduled for November 20. 2007.

Proposed Claims begin on page 2 of this paper.

Application No. 10/706,569

File No.: 5003073.034US1

Proposed Claims:

Claims 1-2 (Canceled)

3. (Previously Presented) The coated superabsorbent polymer particulate of

claim 29 wherein the coating is selected from the group consisting of calcium chloride, sodium

chloride, potassium chloride, calcium nitrate, magnesium chloride, aluminum sulfate, aluminum

chloride and ferric chloride.

4. (Previously Presented) The coated superabsorbent polymer particulate of

claim 29 having a delayed free water absorption property of absorbing about 3 grams or less of

water per gram of superabsorbent polymer in about 15 seconds.

5. (Previously Presented) The coated superabsorbent polymer particulate of

claim 29 having a delayed free water absorption property of absorbing about 2 grams or less of

water per gram of superabsorbent polymer in about 15 seconds.

6. (Previously Presented) The coated superabsorbent polymer particulate of

claim 29 having a delayed free water absorption property of absorbing about 1 gram or less of

water per gram of superabsorbent polymer in about 15 seconds.

Claim 7 (Canceled)

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8. (Previously Presented) The coated superabsorbent polymer particulate of claim 29 having a centrifuge retention capacity of retaining 28 grams or more of aqueous saline per gram of superabsorbent polymer and having an absorbency under load at 0.9 psi of retaining more than 13 grams of aqueous saline per gram of superabsorbent polymer.

- 9. (Previously Presented) The coated superabsorbent polymer particulate of claim 29 having a delayed free water absorption property of absorbing about 3 grams or less of water per gram of superabsorbent polymer in about 15 seconds, a centrifuge retention capacity of retaining 25 grams or more of aqueous saline per gram of superabsorbent polymer and having an absorbency under load at 0.9 psi of retaining more than 18 grams of aqueous saline per gram of superabsorbent polymer.
 - 10. (Currently Amended) A coated superabsorbent polymer particulate comprising
 - a) a superabsorbent polymer particulate comprising from about 55 to about 99.9 wt.% of polymerizable unsaturated acid group containing monomers; and

from about 0.001 to about 5.0 wt.% of internal crosslinking agent based on the polymerizable unsaturated acid group containing monomer; wherein the composition has a degree of neutralization of more than about 25%; and

b) from about 0.5 to about 20 wt.% of a salt-coating selected from a group consisting of monovalent salts, divalent salts, trivalent salts and higher salts on the superabsorbent polymer particulate surface wherein the coating (b) on the surface of the superabsorbent particles can be washed off with water as described in the Free Water Absorption 15 second (FWA_{15sec}) Test;

wherein the superabsorbent polymer composition of step (a) has a free water absorption property of absorbing about 8 grams or more of water per gram of superabsorbent polymer in about 15 seconds; and wherein the coated superabsorption polymer particulate having a delayed free water absorption property of absorbing about 3 grams or less of water per gram of superabsorbent polymer in about 15 seconds wherein the salt coating is selected from calcium chloride, sodium chloride, potassium chloride, calcium nitrate, magnesium chloride, aluminum sulfate, aluminum chloride and ferric chloride.

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Claims 11-13 (Canceled)

- 14. (Previously Presented) The coated superabsorbent polymer particulate of claim 10 having a delayed free water absorption property of absorbing about 2 grams or less of water per gram of superabsorbent polymer in about 15 seconds.
- 15. (Previously Presented) The coated superabsorbent polymer particulate of claim 10 having a delayed free water absorption property of absorbing about 1 gram or less of water per gram of superabsorbent polymer in about 15 seconds.

Claim 16 (Canceled)

17. (Previously Presented) The coated superabsorbent polymer particulate of claim 10 having a delayed free water absorption property of absorbing about 3.6 grams or less of

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water per gram of superabsorbent polymer in about 15 seconds, a centrifuge retention capacity of retaining 28 grams or more of aqueous saline per gram of superabsorbent polymer and having an absorbency under load at 0.9 psi of retaining more than 13 grams of aqueous saline per gram of superabsorbent polymer.

- 18. (Previously Presented) The coated superabsorbent polymer particulate of claim 10 having a delayed free water absorption property of absorbing about 2 grams or less of water per gram of superabsorbent polymer in about 15 seconds, a centrifuge retention capacity of retaining 25 grams or more of aqueous saline per gram of superabsorbent polymer and having an absorbency under load at 0.9 psi of retaining more than 18 grams of aqueous saline per gram of superabsorbent polymer.
- 19. (Previously Presented) The coated superabsorbent polymer particulate of claim 10 having a delayed free water absorption property of absorbing about 1 gram or less of water per gram of superabsorbent polymer in about 15 seconds, a centrifuge retention capacity of retaining 28 grams or more of aqueous saline per gram of superabsorbent polymer and having an absorbency under load at 0.9 psi of retaining more than 16 grams of aqueous saline per gram of superabsorbent polymer.

Claims 20-28 (Canceled)

29. (Currently Amended) A coated surface crosslinked superabsorbent polymer composition comprising a superabsorbent polymer comprising:

a) from about 55% to about 99.9 % by weight of the superabsorbent polymer of polymerizable unsaturated acid group containing monomer based on the superabsorbent polymer; and

b) from about 0.001% to about 5% by weight of internal crosslinking agent based on the polymerizable unsaturated acid group containing monomer; wherein the superabsorbent polymer has a degree of neutralization of greater than about 25%; wherein elements a) and b) are polymerized and prepared into superabsorbent polymer particles;

further comprising on the surface of the superabsorbent polymer particles

- (c) from about 0.001% to about 5% by weight of surface crosslinking agent based on the dry superabsorbent polymer composition; wherein the superabsorbent polymer particles of step (c) are heated at a temperature of from about 85°C to about 210°C to form surface crosslinked superabsorbent polymer particles; and
- (d) from about 0.5 to about 20 wt.% by weight of a water insoluble inorganic metal compound coating selected from a group consisting of monovalent salts, divalent salts, trivalent salts and higher salts; coated onto the surface of the superabsorbent polymer particles including wherein the coating includes a metal salt based on the dry superabsorbent polymer composition wherein the coating (d) on the surface of the superabsorbent particles can be washed off with water as described in the Free Water Absorption 15 second (FWA_{15sec}) Test;

wherein the surface crosslinked superabsorbent polymer composition of step (c) has a free water absorption property of absorbing about 8 grams or more of water per gram of superabsorbent polymer in about 15 seconds; and wherein the coated surface crosslinked superabsorbent

polymer composition has a delayed free water absorption property of absorbing about 3.6 grams

or less of water per gram of superabsorbent polymer in about 15 seconds.

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- 30. (Previously Presented) The coated surface crosslinked superabsorbent polymer composition of claim 29 wherein after element d) the coated SAP is dried at a temperature of about 100°C for about 1 hour.
- 31. (Previously Presented) The coated surface crosslinked superabsorbent polymer composition claim 10 wherein after element b) the coated SAP is dried at a temperature of about 100°C for about 1 hour.

Conclusion

Applicant submits that the proposed claims for the purpose of discussion during the Interview of November 20, 2007. .

Respectfully submitted,

/Philip P. McCann/

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